

# NOAA Funds Nearly \$1 Million in New MRIP Data Improvement Projects

In May 2009, NOAA Fisheries announced \$843,000 in new funding to support 12 MRIP projects. This is on top of the more than \$1 million allocated in 2008 to jumpstart the work of expert work groups tasked with evaluating and recommending improvements to data collection in five critical areas.

The latest funding will build upon that work by launching new projects and expanding on existing initiatives. For example, the **for-hire work group** recently issued a series of recommendations on strategies to improve data collected from party and charter boats. The complete document is available online at [www.CountMyFish.noaa.gov](http://www.CountMyFish.noaa.gov), but the report's chief recommendation was to move away from telephone surveys and toward universal electronic logbook reporting. Several of the newly funded projects for 2009 will pilot test this recommendation by developing electronic logbooks, examining ways to validate this self-reported data, and improving the statistical reliability of dockside or onboard sampling on for-hire boats.

Other projects (listed below) will improve the surveys by expanding the sampling pool and reducing potential bias; improving and expanding counting methods for released fish, certain types of fishing, and non-licensed anglers; developing standards across states and regions to make data more comparable; and creating new counting methods related to highly migratory fisheries of special concern.

## SUMMARY OF NEWLY FUNDED PROJECTS

### IMPROVED DATA COLLECTION AND ANALYSIS

*Management decisions are based on data that must be comprehensive, detailed, and accurate. Ensuring surveys and subsequent analysis meet these needs is the principal task of the **Design and Analysis Work Group**. It is working to ensure we have as clear a picture as possible of what species we're catching, how many we're catching, where we're catching them, and when we're catching them.*

### Design and Analysis Work Group – New Projects:

● = Evaluation Phase    ■ = Innovation Phase    ◆ = Activation Phase

#### ■ Testing a Mail Survey Alternative

Project will test mail surveys as alternatives to telephone surveys in the dual-frame approach. The pilot project will assess 1) coverage of the independent sample frames (license and address frames), 2) response rates that can be achieved by using a mail survey from both the general population and the license frame, 3) timeliness of mail surveys for estimating recreational fishing effort, and 4) the overlap between sample frames and if this overlap can be determined by matching addresses, rather than relying on survey responses.

*Projected Completion: February 2010*

#### ■ Quantifying Differences in Catch Rates, Characteristics and Behavior between Accessible and Non-Accessible Saltwater Fishing Trips



Develop a methodology to test for differences in catch rate, angler characteristics, and behavior between trips sampled by field interviewers and trips that are not because of factors such as private property restrictions or the remoteness of the location.

*Projected Completion: March 2010*

#### ■ **Expanding the Dual-Frame Telephone Survey**

Expansion of ongoing dual frame sampling methodology testing (whereby fishing licenses holders are used as a sampling frame rather than coastal households) to the Washington recreational fishery.

*Projected Completion: August 2010*

### **IMPROVED DATA MANAGEMENT**

*Proper analysis requires a clear understanding of the characteristics of data, both its strengths and limitations. The **Data Management and Standards Work Group** is making sure that managers and scientists understand how data are generated so that the data are used properly.*

#### **Data Management and Standards Work Group – New Projects:**

● = Evaluation Phase    ■ = Innovation Phase    ◆ = Activation Phase

##### ● **Improving Data Collection Quality Control**

Document existing data quality control programs to evaluate their effectiveness in limiting error introduced during data collection, processing, and estimation.

*Projected Completion: December 2009*

##### ■ **Improving Intercept Survey Design**

This pilot project will assess various sources of potential bias in the design of the current intercept survey being conducted in North Carolina.

*Projected Completion: June 2010*

### **HIGHLY MIGRATORY SPECIES**

*Highly migratory species provide a special challenge to fisheries managers. The total number of trips specifically targeting these fish is relatively small and difficult to accurately characterize in a broad survey, so a more targeted approach is required.*

#### **Highly Migratory Species (HMS) Work Group – New projects:**

● = Evaluation Phase    ■ = Innovation Phase    ◆ = Activation Phase

##### ● **Evaluating Survey Design for West Coast Highly Migratory Shark Fisheries**

Explore adaptive sampling methodologies to improve recreational catch estimates of Pacific coast shark species. Assess three levels of sampling uncertainty in the California HMS shark fishery: 1) sampling for thresher sharks in what is considered a pulse fishery, 2) testing the assumption that catch composition and rates are the same for private and public access sites and trips made at night, and 3) catches from tournaments.

*Projected Completion: March 2010*



### ◆ **Continuation of Highly Migratory Species For-Hire Survey in Florida**

Extension of ongoing project to characterize the fishery and estimate HMS landings for a complete tourist season.

*Projected Completion: August 2009*

## **FOR-HIRE VESSELS**

*The for-hire sector – charter boats, 6-packs, guide boats, party boats, and head boats are a mix between commercial and recreational fisheries as far as data is concerned because each state has its own licensing and reporting requirements. Since a significant number of fish are taken by for-hire boats, getting an accurate accounting of this sector is a critical management need.*

### **For Hire-Work Group – New Projects:**

● = Evaluation Phase    ■ = Innovation Phase    ◆ = Activation Phase

#### ■ **Developing Probability-Based Sampling Methods**

Hire a consultant with expertise in survey sampling design to develop probability based sampling protocols for the southeast head boat intercept survey to reduce individual sampler discretion and ensure a truly random sample. Develop guidance on applying the probability-based sampling protocols to use as a tool to aid in validation of self-reported logbook data (using the intercept data to validate the self reported logbooks).

*Projected Completion: September, 2009*

#### ■ **Validating Trip and Catch Data in the Hawaii Commercial Marine License Reporting Program**

Develop a dock-side charter vessel activity study to independently document trip and catch at 1-3 major charter harbors in the state to assess non-compliance and inaccurate reporting. At the same time, the dealer “trip ticket” data and Maui voluntary data for charter fleets will be used to identify issues in the current Commercial Marine License reporting system.

*Projected Completion: July 2010*

#### ■ **Pilot Testing of Electronic Logbooks**

Develop and test a web-based logbook in cooperation with a subset of eight headboats in the southeastern U. S. Results from the paper and electronic reporting systems will be compared for a one-year reporting period to determine reliability, accuracy, compliance, timeliness and cost of both methods. Intercept sampling will be used to validate logbook submissions.

*Projected Completion: October 2010*

#### ■ **Accounting for Missing Data in a Logbook Program**

Hire an expert in survey design and statistics to design a method to account for missing data (due to reporting non-compliance or other issues), including data propagation or gathering, estimation of summary catch and effort statistics and annual adjusted statistics of the Head Boat fishery of the Atlantic and Gulf Coast.

*Projected Completion: May, 2010*

#### ■ **Designing of a Logbook Reporting Program for the Gulf of Mexico**



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Working with expert consultants and industry, design a regional logbook reporting program with validation of self-reported data, compliance tracking, non-response follow-up, and methods to adjust raw logbook data for misreporting and non-response for future implementation in the Gulf of Mexico.

*Projected Completion: August 2009*

#### **FOR MORE INFORMATION**

To learn more about what the MRIP team is doing to improve data for managing saltwater fishing, or for questions or comments, please visit [www.countmyfish.noaa.gov](http://www.countmyfish.noaa.gov).